

## **ETFE Foil for Applications in Architecture**

The main advantages of this exceptional material are:

- > Lightweight allows larger spans with less support material
- Flame retardant
- Transparency similar to glass
- Self-cleaning
- Superior acoustic properties
- > Architecturally dynamic for cost effective design in virtually any shape
- Long service life
- > 100% recyclable
- > Cost less than traditional glass panels

Ethylene-tetrafluoroethylene, better known by its acronym ETFE, offers designers a remarkable solution that integrates modern lightness, durability, design and ecological values.

## The main advantages of using ETFE films



ETFE foil is a chemically inert material and resists all chemical agents combining surface tension and provides great resistance to all environmental pollution. The advantage of self-cleaning properties is that they do not weather or require cleaning other than general rainfall

> **TENSILE STRUCTURE SYSTEMS** 300 East Lombard Street | 8th Floor | Baltimore, MD 21202 P. 410.814.7525 | info@tensileinc.com | TensileInc.com



The excellent light transmission properties (>92%) and the very low weight compared to glass panels (about 1%), allow you to create lightweight and architecturally dynamic structures and roof systems. In addition, when using PTFE in pressurized pillows, it is possible to achieve control of both sunlight transmission and effective insulation properties to meet codes.

EFTE foil covering also offers excellent acoustic properties, as the material does not reflect sound well which allows it to virtually eliminate the echo effect so common with glass.

The material is approved fire resistant per international building codes. When exposed to flame, the material actually shrinks and does not spread flames or have any falling or dripping material.

UV radiation does not degrade the material and this combined with being inert to chemical guarantees extreme durability without losing performance in conditions ranging from desert climates to extreme cold climates and ranges of -190°C to +150°C.

An ETFE cladding system offers a flexible and lightweight alternative to traditional glass cladding which is sensitive to slight movements of the building's primary structure. ETFE, whether used as a single-layer membrane tensioned between structural framework or as pneumatically prestressed air cushions. The versatility allows it to adapt to deformations or unique shapes and designs of any given structure.

ETFE is also an environmental friendly material and is 100% recyclable at a cost more competitive than glass.



What can ETFE do for you? It is only limited by your imagination.

**TENSILE STRUCTURE SYSTEMS** 300 East Lombard Street | 8th Floor | Baltimore, MD 21202 P. 410.814.7525 | info@tensileinc.com | TensileInc.com